

3 MAR 1978

Robert E. Morse, III
Baker & Botts
One Shell Plaza
Houston, Texas 77002

Re: Ethyl Corporation Ocean Disposal
Permit No. 73000090

Dear Mr. Morse:

We have received the Ethyl Corporation's request for an extension of the expired Ocean Disposal Permit No. 73000090 until such time as a final determination on the pending adjudicatory hearing has been made.

We have determined that an extension is warranted in Ethyl's case for the reasons stated in the request of February 15, 1978. The regulations published in the Federal Register, January 11, 1977, provide for the following at Part 222.10(c):

"Prior to the conclusions of the adjudicatory hearing and appeal process, the ... Regional Administrator ... in his discretion may extend the duration of a previously issued permit until a final determination has been made pursuant to Part 222.11 or 222.12."

We interpret use of this provision as being within the sole discretion of the Regional Administrator. We believe further that an extension of "a previously issued permit" applies to all types of permits, including interim permits, where such interim permit has expired and the adjudicatory hearing process is not concluded.

An extended permit should have a finite expiration date, however, and we so extend expired permit No. 73000090 for 180 days as more specifically set forth below.

Page 1 of Ocean Disposal permit is hereby extended in the following manner:

1. Effective Date of Extension - March 1, 1978.

2. Expiration Date - August 1, 1978, or such earlier date of a final determination after an adjudicatory hearing, provided that such earlier date does not apply if further appeal is made pursuant to 40 CFR Part 222.12.

GAEPP
Vickery

GAEL
Collins

GAE
Bergman

GAEL:MChandler:ab:X2760:2/27/78

3. All other terms and conditions of expired permit 72000090 shall be in full force and effect and shall be adhered to by permittee.

A copy of this extension shall be attached to Permit No 73000090 and shall be displayed on any vessel engaged for use under this extension.

Should you have any questions or comments, please contact Mark Chandler in Dallas, Texas, telephone (214) 767-2750.

Extension Ordered:

/s/ Myron O. Knudsen

Arlene Harrison
Regional Administrator
Region VI

cc: Commander
U.S. Coast Guard
Eight Coast Guard District
500 Camp Street
Hale Boggs Building
New Orleans, Louisiana 70130

Mr. W. F. Armstrong
Vice President - Manufacturing
Ethyl Corporation
451 Florida
Baton Rouge, Louisiana 70801

bcc: T. A. Wastler
Chief, Marine Protection Branch (MH-548)
EPA, Washington, D.C.

d. Fathometer records of the entire run during which barging operations or dumping operations were taking place.

e. A negative report of a cancelled or changed dump, if, for any reason, a numbered barge trip for which notice is required by General Condition No. 8, is not made or the timing is changed.

8. Permittee shall notify by telegram the U.S. Coast Guard (local Captain of the Port) and the Regional Administrator not later than 12 hours prior to the departure from permittee's facility of any tug or vessel which is to depart to sea for a barging operation. Included in such notification shall be:

a. A sequential numbering system for the barge trips authorized by this permit. All communications relative to each barge trip shall reflect the number designated.

b. A statement of the amount, in tons, of materials to be dumped.

c. A chemical description, as determined by chemical analysis, of the constituents listed in Special Condition No. 1.

d. The names and registry numbers of the tug and barge scheduled for departure.

e. The estimated time of arrival at the dump site and the estimated time of return to port and the port of return.

Such notice shall be received by the Regional Administrator 12 hours in advance of departure or at such time greater than 12 hours to allow receipt by the Regional Administrator during normal working hours. If permittee anticipates a weekend or holiday dump, he shall notify the Regional Administrator the working day prior to the weekend or holiday and a duty official will be assigned by EPA for receiving the report. In the event the metals analysis exhibits concentrations in violation of the limitations of this permit, permittee shall cause the master of the vessel to not discharge and return to port.

9. The permittee shall maintain complete records, which shall be available for inspection and copying by the Administrator, the Regional Administrator, or their designees, of:

a. The nature, including a complete description of relevant physical characteristics of material dumped pursuant to the permit.

b. The precise times and locations of dumping.

c. Any information relevant to the assessment of the impact of permitted dumping activities on the marine environment or human health or welfare.

10. The permittee shall, at the end of each six-month period, beginning on August 15, 1974, make a report to the Regional Administrator of the following information:

a. Information in the records to be kept pursuant to Paragraph 9 of the General Conditions.

b. A summary of the reports required by Paragraph 7 of the General Conditions.

c. Any additional records or reports required in the Special Conditions of this permit.

d. An analysis of all elements listed in 227.31(b)(1) of the ocean dumping final regulations and criteria (40 C.F.R. 227.31), excluding those reported under Special Condition 1.a. of herein permit, from a composite sampling from each barging operation.

11. The permittee shall make an additional report in accordance with the requirements of Paragraph 10 of the General Conditions at the expiration of this permit.

12. Reports required by Paragraphs 10 and 11 of the General Conditions shall be received by the Regional Administrator within 30 days following the end of the required reporting period.

13. If the dumping of material which is regulated by this permit is dumped due to emergency to safeguard life at sea in locations or in a manner not in accordance with the terms of this permit, the permittee shall make a full report in accordance with the provision of 18 U.S.C. 1001, within 30 days to the Regional Administrator of the emergency and the actions taken.

14. The reporting requirements contained in this permit are in addition to any reporting requirements of any other State or Federal Agency.

15. In the event any portion of the authorized dumping or transporting is done by a person, firm or corporation other than the named permittee, any and all reports required hereunder shall be jointly executed by both permittee and such other person, firm or corporation in accordance with the provisions of 18 U.S.C. 1001 by an officer or employee of such other person, firm or corporation.

16. The performance of any transportation or dumping authorized by this permit, by any person, firm or corporation other than the named permittee shall not relieve permittee from full responsibility for compliance herewith, nor shall the issuance of this permit to permittee relieve such other person, firm or corporation from responsibility for compliance herewith, nor shall the existence of any such contractual or other relationship between permittee and any other such person, firm or corporation operate to relieve either party from responsibility for compliance with this permit or the Act or both.

17. Terms used in this permit which are defined in Section 3 of the Act shall have the same meaning herein.

Special Conditions

1. Description of Material

In accordance with all other terms and conditions of this permit, the permittee is authorized to transport for dumping and to dump in ocean waters, material which shall not exceed in its physical and chemical characteristics the concentrations and loads listed below.

a.	<u>Composition Constituents</u>	<u>Concentrations (wt/wt)</u>
		<u>Not to Exceed Per Drum Contents</u>
	Total Sodium (in metal and oxide)	70%
	Total Calcium (in metal and oxide)	16%
	Sodium and Calcium Chlorides	range 18-23%
		<u>Per Barge Trip</u>
	Cadmium	0.75 pounds
	Mercury	0.10 pounds

b. The proposed waste material to be dumped is a waste sodium-calcium sludge. The contents are solid metallic sodium, metallic calcium, and oxides of these metals, plus sodium chloride.

c. The character of the material being dumped shall not be altered in its content from the foregoing by the addition of waste from sources other than those identified in the application or otherwise.

2. Amount of Material

a. The permittee is authorized to transport and dump material described in Paragraph 1 an amount not in excess of 800 drums per month.

b. Such transportation and dumping shall not be in excess of 800 drums per trip and at a frequency not to exceed 1 trip per month. The total number of drums authorized for dumping under this permit shall not exceed 8000.

c. During the month of February 1974, the permittee is authorized under this permit to transport and dump 400 drums of material as described in Paragraph 1.

3. Transportation and Barging Activities

a. The port of departure for the dumping of the material described herein is Baton Rouge, Louisiana. The permittee is authorized to transport the material described herein from his facility to such port of departure to ocean waters.

b. During transportation and loading operations, there shall be no loss of material to any waterway. Transportation of the material from the Houston Plant shall be in accordance with all Department of Transportation regulations.

c. The permittee is authorized to dump the prescribed wastes in an approved dumping site which is defined in longitude and latitude as follows:

- (1) 28 degrees 00 minutes north latitude
- (2) 28 degrees 10 minutes north latitude
- (3) 89 degrees 15 minutes west longitude
- (4) 89 degrees 30 minutes west longitude

e. The permittee shall regulate the dumping rate so that the drummed wastes described in Special Condition 1, above, shall be dispersed from a barge hereinafter identified at intervals of 270 feet or more.

f. The permittee shall continue to use a system of identification for each container such that at any time later such container can be identified as specific wastes from the permittee's facility.

g. The permittee shall puncture each drum prior to release from the barge with not less than six (6) one-half inch holes. The holes shall be punched in the top and bottom and at 90 degrees apart around the center of each drum.

4. Means of Transportation

a. The means of transportation shall be one of the following named vessels:

<u>Company</u>	<u>Barge</u>
Lockport Chemical Company (Chemical Waste Disposal Co.)	Magnolia I

b. The permittee shall place this permit or a copy of this permit in a conspicuous place in the vessel which will be used for the transportation or dumping herein authorized.

5. Implementation Schedules

a. Permittee shall reduce the cadmium concentration, as a minimum, to 0.6 mg/kg by December 15, 1974, in waste originating from the Houston plant or waste originating from the Houston plant will be prohibited from dumping after December 15, 1974, under this permit.

b. Permittee shall achieve compliance with (a) above in accordance with 40 C.F.R. 227.4 and the following schedule:

(1) Report on treatment or process modification required for cadmium reduction	<u>June 1, 1974</u>
(2) Progress report	<u>September 1, 1974</u>
(3) Reduction of Cadmium to 0.6 mg/kg	<u>December 15, 1974</u>

c. Permittee shall submit the required report of progress to the Regional Administrator on the date specified for the report. Where an action is required in (b) above by a certain date, a written notice of compliance or noncompliance shall be submitted within 15 days following each elapsed date. Each notice of noncompliance shall include:


(1) a description of the noncompliance and an explanation for the noncompliance;

(2) a description of any actions taken or proposed by the permittee to comply with the requirement; and

(3) a date for the attainment of the requirement plus an assessment of the probability that permittee will meet the next requirement of time.

FEB 13 1974

Date



Arthur W. Busch
Regional Administrator
Region VI

ENVIRONMENTAL PROTECTION AGENCY

REGION VI

1600 PATTERSON, SUITE 1100
DALLAS, TEXAS 75201

August 3, 1973

OFFICE OF THE
REGIONAL ADMINISTRATOR

Mr. Wallace F. Armstrong
Vice President, Manufacturing Dept.
Ethyl Corporation
P. O. Box 341
Baton Rouge, Louisiana 70821

Dear Mr. Armstrong:

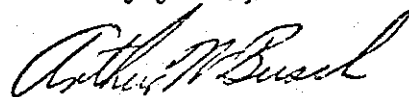
Your application for an amendment to your Ocean Dumping Permit has been received and reviewed by this office. As a result of that review and through my authority under Public Law 92-532 and the regulations at 40 C.F.R. 220.4, I hereby issue your facility an amended permit for ocean dumping, such permit being attached hereto and numbered No. 730D009A.

The attached amendment affects only Special Condition 1(a), Special Condition 6(b)(3) and 6(b)(4). All other terms and conditions of the original permit are unchanged. The amendment to Special Condition 1(a) reflects only a change in definition and does not permit a total load in excess of that authorized by the original permit. Special Condition 6(b)(3) has been deleted because there is no reason to expect accumulation of the waste described in Special Condition 1(a). It does not reflect our agreement that there are no test procedures to study bioaccumulation nor does it reflect on any quantity of the waste being discharged in the ocean.

The Ethyl Corporation has submitted to this office one chemical analysis for metals. We request that you analyze for metals an additional two (2) composite samples. Such analyses will enable this office to better evaluate your application for renewal of your present permit.

The attached amended permit also has an expiration date of November 1, 1973. In the event your company desires to continue beyond that date, your application for renewal should be submitted as soon as possible.

Sincerely yours,



Arthur W. Busch
Regional Administrator

Attachment a/s



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON, SUITE 1100
DALLAS, TEXAS 75201

PERMIT

Permit No. 730D009A

Name of Permittee Ethyl Corporation

Effective Date August 3, 1973

Expiration Date November 1, 1973

MARINE PROTECTION, RESEARCH AND
SANCTUARIES ACT (OCEAN DUMPING) PERMIT

In reference to the following application:

Application Number: 730D009A

for a permit authorizing the transportation and dumping of any material in compliance with the provisions of the Act of Congress enacted October 23, 1972, entitled The Marine Protection, Research and Sanctuaries Act of 1972, (hereinafter referred to as the Act),

Ethyl Corporation,

hereinafter called permittee, is authorized to transport material for dumping from its facility at

P. O. Box 341

Baton Rouge, Louisiana 70821

and to dump to ocean waters, all in accordance with the following general and special conditions:

General Conditions

1. All transportation and dumping authorized herein shall be consistent with the terms and conditions of this permit.
2.
 - a. Transportation to, and dumping at any location other than that authorized by this permit shall constitute a violation of the terms and conditions of this permit.
 - b. Transportation and dumping of any material more frequently than or in excess of that identified and authorized by this permit, or dumping of material not authorized by this permit, shall constitute a violation of the terms and conditions of this permit.
 - c. Permittee shall comply with each and every condition, provision and limitation in this permit and compliance with one or more but less than all conditions, provisions and limitations shall not constitute a ground or grounds of defense in any proceeding against permittee for violation of one or more of such conditions, provisions or limitations.
3. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
 - a. Violation of any term or condition of this permit;
 - b. Misrepresentation, inaccuracy or failure by the applicant to disclose all relevant facts in the permit application.
 - c. A change in any condition or material fact upon which this permit is based that requires either a temporary or permanent reduction or elimination of the authorized transportation or dumping including, but not limited to, changes in conditions at the designated dumping site, and newly discovered scientific data relative to the granting of this permit.
 - d. A determination by the Regional Administrator that the permitted dumping has resulted, is resulting or may result in imminent and substantial harm to human health or welfare or the marine environment.
 - e. Failure to keep the records and/or to notify appropriate officials of dumping activities.
4. The permittee shall allow the Regional Administrator and/or the U. S. Coast Guard, and/or their authorized representatives, upon the presentation of credentials;

a. To enter into, upon, or through the permittee's premises, vessels or other premises or vessels under the control of permittee, where, or in which, a source of material to be dumped is located or in which any records are required to be kept under the terms and conditions of this permit or the Act;

b. To have access to and copy any records required to be kept under the terms and conditions of this permit or the Act;

c. To inspect any monitoring equipment or monitoring method required in this permit; or,

d. To sample any materials discharged or to be discharged.

5. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private or public property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

6. This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or, except as authorized by this permit, the undertaking of any work in any navigable waters.

7. Within 48 hours of the completion of each barging operation, permittee shall forward by depositing in the United States mail to the Regional Administrator a report which shall be verified in accordance with the provisions of 18 U.S.C. 1001, by a responsible officer or employee of Permittee, which report shall contain as a minimum, the following:

a. The total amount of material dumped and the amounts, in percent and poundage, of each constituent thereof. The content of the constituent shall be verified by an analysis of the material dumped which shall be performed prior to such dumping operation. Records of such analyses, when requested by the Regional Administrator, shall be included with such report.

b. A statement of the Greenwich mean time at which each barging operation was commenced, the latitude and longitude of the place where each barging operation was commenced, and the Greenwich mean time and the latitude and longitude of the place where each barging operation ceased, as well as the latitude and longitude of the mid point of the course made good if such barging operation extended over a period of six hours.

c. Fathometer records of the entire run during which barging operations or dumping operations were taking place shall be submitted.

8. Permittee shall notify by telegram the U. S. Coast Guard (local Captain of the Port) and the Regional Administrator not later than 24 hours prior to the departure from permittee's facility of any tug or vessel which is to depart to sea for a barging operation. Included in such notification shall be a statement of the amount of materials to be dumped and all constituents thereof as determined by chemical analysis.

9. The permittee shall maintain complete records, which shall be available for inspection and copying by the Administrator, the Regional Administrator, or their designees, of:

a. The nature, including a complete description of relevant physical characteristics of material dumped pursuant to the permit.

b. The precise times and locations of dumping.

c. Any information relevant to the assessment of the impact of permitted dumping activities on the marine environment or human health or welfare.

10. The permittee shall, at the end of each six month period, beginning with the date of this permit, make a report to the Regional Administrator of the following information:

a. Information in the records to be kept pursuant to Paragraph 9 of the General Conditions,

b. A summary of the 48 hour reports required by Paragraph 7 of the General Conditions, and

c. Any additional records or reports required in the Special Conditions of this permit.

11. The permittee shall make an additional report in accordance with the requirements of Paragraph 10 of the General Conditions at the expiration of this permit, unless renewed.

12. Reports required by Paragraphs 10 and 11 of the General Conditions shall be received by the Regional Administrator within 30 days following the end of the required reporting period.

13. If the dumping of material which is regulated by this permit is dumped due to emergency to safeguard life at sea in locations or in a manner not in accordance with the terms of this permit, the permittee shall make a full report in accordance with the provisions of 18 U.S.C. 1001, within 30 days to the Regional Administrator of the emergency and the actions taken.

14. The reporting requirements contained in this permit are in addition to any reporting requirements of any other State or Federal Agency.

15. In the event any portion of the authorized dumping or transporting is done by a person, firm or corporation other than the named permittee, any and all reports required hereunder shall be jointly executed by both permittee and such other person, firm or corporation in accordance with the provisions of 18 U.S.C. 1001 by an officer or employee of such other person, firm or corporation.

16. The performance of any transportation or dumping authorized by this permit, by any person, firm or corporation other than the named permittee shall not relieve permittee from full responsibility for compliance herewith, nor shall the issuance of this permit to permittee relieve such other person, firm or corporation from responsibility for compliance herewith, nor shall the existence of any such contractual or other relationship between permittee and any other such person, firm or corporation operate to relieve either party from responsibility for compliance with this permit or the Act or both.

17. Terms used in this permit which are defined in Section 3 of the Act shall have the same meaning herein.

18. The applicant shall submit, within 90 days of the effective date of this permit, to the Regional Administrator and the appropriate Captain of the Port, U. S. Coast Guard, a Spill Prevention, Containment and Countermeasure Plan for any spillage or total loss of the material while loading or transporting through the territorial sea.

Special Conditions

1. Description of Material

In accordance with all other terms and conditions of this permit, the permittee is authorized to transport for dumping and to dump in ocean waters, material which shall not exceed in its physical and chemical characteristics the concentrations and loads listed below, and which shall not include material in addition to, or in excess of, the amounts specified on the application dated April 19, 1973.

a. Chemical Composition:

<u>Constituents</u>	<u>Concentrations or Percentage (wt/wt) Not to Exceed Drum Content</u>
Total Sodium (in Metal and Oxide)	70%
Total Calcium (in Metal and Oxide)	16%
Sodium and Calcium Chlorides	Range 18 - 23%
<u>Metals</u>	<u>Average</u>
Copper	1 ppm

b. The proposed waste material to be dumped is a waste sodium-calcium sludge. The contents are solid metallic sodium, metallic calcium, and oxides of these metals, plus sodium chloride. The sodium chloride is fill material used to fill the void spaces and to provide added weight to ensure sinking of the drum.

c. The character of the material being dumped shall not be altered in its content from the foregoing by the addition of wastewaters from sources other than those identified in the application or otherwise.

2. Amount of Material

a. The permittee is authorized to transport and dump material described in Paragraph 1 an amount not in excess of 700 barrels per month. (tons or barrels).

b. Such transportation and dumping shall not be in excess of 700 barrels per trip and at a frequency not to exceed 1 (tons or barrels) trip per month.

3. Transportation and Barging Activities

a. The port of departure for the dumping of the material described herein is Baton Rouge, Louisiana. The permittee is authorized to transport the material described herein from his facility to such port of departure to ocean waters.

b. During transportation and loading operations, there shall be no loss of material to any waterway. Transportation of the material from the Houston Plant shall be in accordance with all Department of Transportation regulations.

c. The permittee is authorized to dump the prescribed wastes in an approved dumping site which is defined in longitude and latitude as follows:

1. 28 degrees 00 minutes north latitude
2. 28 degrees 20 minutes north latitude
3. 89 degrees 15 minutes west longitude
4. 89 degrees 35 minutes west longitude

d. Permittee shall commence dumping operations (the actual discharge of material authorized to be dumped by this permit) no earlier than 1/2 hours after sunrise and shall cease dumping operations not later than 1/2 hours prior to sunset on any day in which dumping operations take place.

e. The permittee shall regulate the dumping rate so that the drummed wastes described in Special Condition 1, above, shall be dispersed from a barge hereinafter identified at intervals of 500 feet or more.

f. In any case where the wastes are containerized, the permittee shall establish and use a system of identification approved by the Environmental Protection Agency for each container such that at any time later such container can be identified as specific wastes from the permittee's facility.

g. The permittee shall puncture each drum prior to release from the barge with not less than six (6) one-half inch holes. The holes shall be punched in the top and bottom and at 90 degrees apart around the center of each drum.

4. Means of Transportation

a. The means of transportation shall be one of the following named vessels:

<u>Company</u>	<u>Barge</u>
Lockport Chemical Company (Chemical Waste Disposal Co.)	Magnolia I

b. The permittee shall place this permit or a copy of this permit in a conspicuous place in the vessel which will be used for the transportation or dumping herein authorized.

5. Implementation Schedules

Permittee shall submit, within ninety (90) days of the issuance of this permit, an implementation schedule, containing an enforceable sequence of actions or operations leading to (1) the elimination of ocean dumping of all the wastes referred to in the application and (2) the treatment of such waste and disposition thereof in a manner consistent with a permit issued by the Regional Administrator pursuant to Title IV of the Federal Water Pollution Control Act Amendments of 1972.

6. Studies

a. The permittee shall immediately initiate studies to determine the effects, both short-term and long-term, of his dumping activities.

b. Such studies shall include, as a minimum, the following:

1. Bioassays of this waste and its effect on marine organisms.

2. In-situ dispersion characteristics of the waste being dumped.

3. The studies required by b.1 and b.2 above shall be submitted within 90 days of the effective date of this permit.

August 3, 1973
(Date)

Arthur W. Busch
Arthur W. Busch
Regional Administrator, Region VI

May 25, 1973

Mr. W. F. Armstrong
Vice President
Ethyl Corporation
451 Florida Avenue
Baton Rouge, Louisiana 70801

Dear Mr. Armstrong:

Your application, as amended, for a permit to dump in ocean waters has been the subject of a final determination by this office, following proper public notice and a public hearing held on April 23, 1973, your comments dated May 16, 1973, and findings and recommendations.

By and through my authority under P.L. 92-532 and the regulations found at 40 C.F.R. 220.4, I hereby issue your facility a permit for ocean dumping, such permit being attached hereto and numbered Permit No. 730D009. The Permittee is the Ethyl Corporation, Baton Rouge, Louisiana.

This permit has an expiration date of November 1, 1973. In the event your company desires to continue ocean disposal beyond the expiration date, your renewal application will be subject to the full-time requirements for processing contained in the regulations at 40 C.F.R. 222.

Sincerely,

/s/ George R. Alexander, Jr.

for Arthur W. Busch
Regional Administrator

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON, SUITE 1100
DALLAS, TEXAS 75201

PERMIT

Permit No. 730D009

Name of Permittee Ethyl Corporation

Effective Date May 25, 1973

Expiration Date November 1, 1973

MARINE PROTECTION, RESEARCH AND
SANCTUARIES ACT (OCEAN DUMPING) PERMIT

In reference to the following application:

Application Number: 730D009

for a permit authorizing the transportation and dumping of any material in compliance with the provisions of the Act of Congress enacted October 23, 1972, entitled The Marine Protection, Research and Sanctuaries Act of 1972, (hereinafter referred to as the Act),

Ethyl Corporation,

hereinafter called permittee, is authorized to transport material for dumping from its facility at

P. O. Box 341

Baton Rouge, Louisiana 70821

and to dump to ocean waters, all in accordance with the following general and special conditions:

General Conditions

1. All transportation and dumping authorized herein shall be consistent with the terms and conditions of this permit.

2. a. Transportation to, and dumping at any location other than that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

b. Transportation and dumping of any material more frequently than or in excess of that identified and authorized by this permit, or dumping of material not authorized by this permit, shall constitute a violation of the terms and conditions of this permit.

c. Permittee shall comply with each and every condition, provision and limitation in this permit and compliance with one or more but less than all conditions, provisions and limitations shall not constitute a ground or grounds of defense in any proceeding against permittee for violation of one or more of such conditions, provisions or limitations.

3. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

a. Violation of any term or condition of this permit;

b. Misrepresentation, inaccuracy or failure by the applicant to disclose all relevant facts in the permit application.

c. A change in any condition or material fact upon which this permit is based that requires either a temporary or permanent reduction or elimination of the authorized transportation or dumping including, but not limited to, changes in conditions at the designated dumping site, and newly discovered scientific data relative to the granting of this permit.

d. A determination by the Regional Administrator that the permitted dumping has resulted, is resulting or may result in imminent and substantial harm to human health or welfare or the marine environment.

e. Failure to keep the records and/or to notify appropriate officials of dumping activities.

4. The permittee shall allow the Regional Administrator and/or the U. S. Coast Guard, and/or their authorized representatives, upon the presentation of credentials;

a. To enter into, upon, or through the permittee's premises, vessels or other premises or vessels under the control of permittee, where, or in which, a source of material to be dumped is located or in which any records are required to be kept under the terms and conditions of this permit or the Act;

b. To have access to and copy any records required to be kept under the terms and conditions of this permit or the Act;

c. To inspect any monitoring equipment or monitoring method required in this permit; or,

d. To sample any materials discharged or to be discharged.

5. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private or public property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

6. This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or, except as authorized by this permit, the undertaking of any work in any navigable waters.

7. Within 48 hours of the completion of each barging operation, permittee shall forward by depositing in the United States mail to the Regional Administrator a report which shall be verified in accordance with the provisions of 18 U.S.C. 1001, by a responsible officer or employee of Permittee, which report shall contain as a minimum, the following:

a. The total amount of material dumped and the amounts, in percent and poundage, of each constituent thereof. The content of the constituent shall be verified by an analysis of the material dumped which shall be performed prior to such dumping operation. Records of such analyses, when requested by the Regional Administrator, shall be included with such report.

b. A statement of the Greenwich mean time at which each barging operation was commenced, the latitude and longitude of the place where each barging operation was commenced, and the Greenwich mean time and the latitude and longitude of the place where each barging operation ceased, as well as the latitude and longitude of the mid point of the course made good if such barging operation extended over a period of six hours.

c. Fathometer records of the entire run during which barging operations or dumping operations were taking place shall be submitted.

8. Permittee shall notify by telegram the U. S. Coast Guard (local Captain of the Port) and the Regional Administrator not later than 24 hours prior to the departure from permittee's facility of any tug or vessel which is to depart to sea for a barging operation. Included in such notification shall be a statement of the amount of materials to be dumped and all constituents thereof as determined by chemical analysis.

9. The permittee shall maintain complete records, which shall be available for inspection and copying by the Administrator, the Regional Administrator, or their designees, of:

a. The nature, including a complete description of relevant physical characteristics of material dumped pursuant to the permit.

b. The precise times and locations of dumping.

c. Any information relevant to the assessment of the impact of permitted dumping activities on the marine environment or human health or welfare.

10. The permittee shall, at the end of each six month period, beginning with the date of this permit, make a report to the Regional Administrator of the following information:

a. Information in the records to be kept pursuant to Paragraph 9 of the General Conditions,

b. A summary of the 48 hour reports required by Paragraph 7 of the General Conditions, and

c. Any additional records or reports required in the Special Conditions of this permit.

11. The permittee shall make an additional report in accordance with the requirements of Paragraph 10 of the General Conditions at the expiration of this permit, unless renewed.

12. Reports required by Paragraphs 10 and 11 of the General Conditions shall be received by the Regional Administrator within 30 days following the end of the required reporting period.

13. If the dumping of material which is regulated by this permit is dumped due to emergency to safeguard life at sea in locations or in a manner not in accordance with the terms of this permit, the permittee shall make a full report in accordance with the provisions of 18 U.S.C. 1001, within 30 days to the Regional Administrator of the emergency and the actions taken.

14. The reporting requirements contained in this permit are in addition to any reporting requirements of any other State or Federal Agency.

15. In the event any portion of the authorized dumping or transporting is done by a person, firm or corporation other than the named permittee, any and all reports required hereunder shall be jointly executed by both permittee and such other person, firm or corporation in accordance with the provisions of 18 U.S.C. 1001 by an officer or employee of such other person, firm or corporation.

16. The performance of any transportation or dumping authorized by this permit, by any person, firm or corporation other than the named permittee shall not relieve permittee from full responsibility for compliance herewith, nor shall the issuance of this permit to permittee relieve such other person, firm or corporation from responsibility for compliance herewith, nor shall the existence of any such contractual or other relationship between permittee and any other such person, firm or corporation operate to relieve either party from responsibility for compliance with this permit or the Act or both.

17. Terms used in this permit which are defined in Section 3 of the Act shall have the same meaning herein.

18. The applicant shall submit, within 90 days of the effective date of this permit, to the Regional Administrator and the appropriate Captain of the Port, U. S. Coast Guard, a Spill Prevention, Containment and Countermeasure Plan for any spillage or total loss of the material while loading or transporting through the territorial sea.

Special Conditions

1. Description of Material

In accordance with all other terms and conditions of this permit, the permittee is authorized to transport for dumping and to dump in ocean waters, material which shall not exceed in its physical and chemical characteristics the concentrations and loads listed below, and which shall not include material in addition to, or in excess of, the amounts specified on the application dated April 19, 1973.

a. Chemical Composition:

<u>Constituents</u>	<u>Concentrations or Percentage (wt/wt) Not to Exceed Drum Content</u>
Metallic Sodium	60%
Metallic Calcium	13%
Calcium Oxide	4%
Sodium Oxide	13%
Sodium & Calcium Chlorides	Range 18 - 23%
<u>Metals</u>	<u>Average</u>
Copper	1 ppm

b. The proposed waste material to be dumped is a waste sodium-calcium sludge. The contents are solid metallic sodium, metallic calcium, and oxides of these metals, plus sodium chloride. The sodium chloride is fill material used to fill the void spaces and to provide added weight to ensure sinking of the drum.

c. The character of the material being dumped shall not be altered in its content from the foregoing by the addition of wastewaters from sources other than those identified in the application or otherwise.

2. Amount of Material

a. The permittee is authorized to transport and dump material described in Paragraph 1 an amount not in excess of 700 barrels per month. (tons or barrels)

b. Such transportation and dumping shall not be in excess of 700 barrels per trip and at a frequency not to exceed 1 (tons or barrels) trip per month.

3. Transportation and Barging Activities

a. The port of departure for the dumping of the material described herein is Baton Rouge, Louisiana. The permittee is authorized to transport the material described herein from his facility to such port of departure to ocean waters.

b. During transportation and loading operations, there shall be no loss of material to any waterway. Transportation of the material from the Houston Plant shall be in accordance with all Department of Transportation regulations.

c. The permittee is authorized to dump the prescribed wastes in an approved dumping site which is defined in longitude and latitude as follows:

1. 28 degrees 00 minutes north latitude
2. 28 degrees 20 minutes north latitude
3. 89 degrees 15 minutes west longitude
4. 89 degrees 35 minutes west longitude

d. Permittee shall commence dumping operations (the actual discharge of material authorized to be dumped by this permit) no earlier than 1/2 hours after sunrise and shall cease dumping operations not later than 1/2 hours prior to sunset on any day in which dumping operations take place.

e. The permittee shall regulate the dumping rate so that the drummed wastes described in Special Condition 1, above, shall be dispersed from a barge hereinafter identified at intervals of 500 feet or more.

f. In any case where the wastes are containerized, the permittee shall establish and use a system of identification approved by the Environmental Protection Agency for each container such that at any time later such container can be identified as specific wastes from the permittee's facility.

g. The permittee shall puncture each drum prior to release from the barge with not less than six (6) one-half inch holes. The holes shall be punched in the top and bottom and at 90 degrees apart around the center of each drum.

4. Means of Transportation

a. The means of transportation shall be one of the following named vessels:

<u>Company</u>	<u>Barge</u>
Lockport Chemical Company (Chemical Waste Disposal Co.)	Magnolia I

b. The permittee shall place this permit or a copy of this permit in a conspicuous place in the vessel which will be used for the transportation or dumping herein authorized.

5. Implementation Schedules

Permittee shall submit, within ninety (90) days of the issuance of this permit, an implementation schedule, containing an enforceable sequence of actions or operations leading to (1) the elimination of ocean dumping of all the wastes referred to in the application and (2) the treatment of such waste and disposition thereof in a manner consistent with a permit issued by the Regional Administrator pursuant to Title IV of the Federal Water Pollution Control Act Amendments of 1972.

6. Studies

a. The permittee shall immediately initiate studies to determine the effects, both short-term and long-term, of his dumping activities.

b. Such studies shall include, as a minimum, the following:

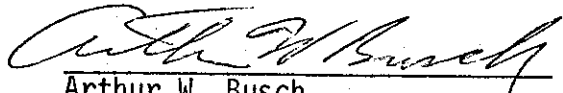
1. Bioassays of this waste and its effect on marine organisms.

2. In-situ dispersion characteristics of the waste being dumped.

3. In-situ data on the bioaccumulation of the wastes, leading to an understanding of the persistence, if any, in the food web.

4. The studies required by b.1 and b.2 above shall be submitted within 90 days of the effective date of this permit. Data required by b.3 above shall be submitted as soon as practical, but not later than 180 days from the effective date of this permit.

May 25, 1973
Date


Arthur W. Busch
Regional Administrator, Region VI



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON
DALLAS, TEXAS 75201

B. Vickery

June 15, 1976

F. Walter Conrad, Esquire
Baker and Botts
One Shell Plaza
Houston, Texas 77002

Re: Ethyl Corporation, Baton Rouge, Louisiana
Ocean Disposal Permit No. 730D009D

Dear Mr. Conrad:


The record on the referenced application and permit has been reviewed and I hereby transmit the Ethyl Corporation an interim permit for one year, effective on July 1, 1976, with an expiration date of June 30, 1977.

My final determination is that an interim permit is applicable in Ethyl's case. In making that determination, I have adopted the Hearing Officer's recommendation dated April 23, 1976. Containerized wastes receive an interpretation different from wastes dumped in bulk and, under the Criteria of 40 CFR 227, the agency is bound to consider the local effects of ruptured drums. It is also my firm belief that wastes containing cadmium, being one of only four substances specifically prohibited except as trace contaminants (Part 227.22), must be accorded the strictest interpretation under the Criteria. I therefore have concluded that a special permit of more than one year duration does not apply.

In special Condition No. 5, Implementation Schedule, we have adopted the language suggested by your letter of May 27, 1976 regarding the "commitment of an alternate" language. In doing so, we have not, as the Hearing Officer has suggested, relaxed the goal that the Ethyl Corporation must find a more environmentally sound method of disposal.

Should you have any questions or comments, please do not hesitate to contact us in Dallas, Texas at (214) 749-2142, either Messrs. Collins or Chandler.

Sincerely yours,


John C. White
Regional Administrator

Enclosure a/s

cc: Mr. W. F. Armstrong
Vice President
The Ethyl Corporation
P. O. Box 341
Baton Rouge, Louisiana 70821



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON
DALLAS, TEXAS 75201

• Extension - See 3 MAR 78 Letter

PERMIT

Permit No. 730D009D - Interim
Name of Permittee Ethyl Corporation
Effective Date July 1, 1976 March 1, 1978
Expiration Date Midnight, June 30, 1977 August 1, 1978

MARINE PROTECTION, RESEARCH AND
SANCTUARIES ACT (OCEAN DUMPING) PERMIT

In reference to the following application:

Application Number: 730D009D

for a permit authorizing the transportation and dumping of any material in compliance with the provisions of the Act of Congress enacted October 23, 1972, entitled The Marine Protection, Research and Sanctuaries Act of 1972, as amended (hereinafter referred to as the Act),

Ethyl Corporation,

hereinafter called permittee, is authorized to transport material for dumping from its facility at:

P. O. Box 341

Baton Rouge, Louisiana 70821

and to dump to ocean waters, all in accordance with the following general and special conditions:

General Conditions

1. All transportation and dumping authorized herein shall be consistent with the terms and conditions of this permit.

2. a. Transportation to, and dumping at any location other than that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

b. Transportation and dumping of any material more frequently than or in excess of that identified and authorized by this permit; or dumping of material not authorized by this permit, shall constitute a violation of the terms and conditions of this permit.

c. Permittee shall comply with each and every condition, provision and limitation in this permit and compliance with one or more but less than all conditions, provisions and limitations shall not constitute a ground or grounds of defense in any proceeding against permittee for violations of one or more of such conditions, provisions or limitations.

3. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

a. Violation of any term or condition of this permit;

b. Misrepresentation, inaccuracy or failure by the applicant to disclose all relevant facts in the permit application.

c. A change in any condition or material fact upon which this permit is based that requires either a temporary or permanent reduction or elimination of the authorized transportation or dumping including, but not limited to, changes in conditions at the designated dumping site, and newly discovered scientific data relative to the granting of this permit.

d. A determination by the Regional Administrator that the permitted dumping has resulted, is resulting or may result in imminent and substantial harm to human health or welfare or the marine environment.

e. Failure to keep the records and/or to notify appropriate officials of dumping activities.

4. The permittee shall allow the Regional Administrator and/or the U.S. Coast Guard, and/or their authorized representatives, upon the presentation of credentials:

a. To enter into, upon, or through the permittee's premises, vessels or other premises or vessels under the control of permittee, where, or in which, a source of material to be dumped is located or in which any records are required to be kept under the terms and conditions of the permit or the Act;

b. To have access to and copy any records required to be kept under the terms and conditions of this permit; or,

c. To inspect any monitoring equipment or monitoring method required in this permit; or,

d. To sample any materials discharged or to be discharged; or

e. To inspect any dumping, navigation or electronic surveillance equipment installed on board any towing or towed vessel or self-propelled vessel used in ocean dumping activities authorized under this permit.

5. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private or public property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

6. This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities, or except as authorized by this permit, the undertaking of any work in any navigable waters.

7. Within 72 hours of the completion of each barging operation, permittee shall forward by depositing in the United States mail to the Regional Administrator a report which shall be verified in accordance with the provisions of 18 U.S.C. 1001, by a responsible officer or employee of Permittee, which report shall contain as a minimum, the following:

a. The total amount of material dumped and the amounts, in parts per million and poundage, of each constituent thereof including cadmium and mercury. The content of the constituent shall be verified by an analysis of the material to be dumped which shall be performed prior to such dumping operation. Records of such analyses shall be included with such report.

b. A statement of the local time at which each barging operation was commenced, the latitude and longitude of the place where each barging operation was commenced, and the time and the latitude and longitude of the place where each barging operation ceased, as well as the latitude and longitude of the mid point of the course made good if such barging operation extended over a period of six hours.

c. The time, date and point of actual departure and return for each barging operation.

d. Fathometer records of the entire run during which barging operations or dumping operations were taking place.

e. A negative report of a cancelled or changed dump, if, for any reason, a numbered barge trip for which notice is required by General Condition No. 8, is not made or the timing is changed.

8. Permittee shall notify by telegram the U.S. Coast Guard (local Captain of the Port) and the Regional Administrator not later than 12 hours prior to the departure from permittee's facility of any tug or vessel which is to depart to sea for a barging operation. Included in such notification shall be:

a. A sequential numbering system starting with number 1, for the barge trips authorized by this permit. All communications relative to each barge trip shall reflect the number designated.

b. A statement of the amount, in tons, of materials to be dumped.

c. A chemical description, as determined by chemical analysis, of the constituents listed in Special Condition no. 1.

d. The names and registry numbers of the tug and barge scheduled for the departure.

e. The estimated time of arrival at the dump site and the estimated time of return to port and the port of return.

Such notice shall be received by the Regional Administrator 12 hours in advance of departure or at such time greater than 12 hours to allow receipt by the Regional Administrator during normal working hours. If permittee anticipates a weekend or holiday dump, he shall notify the Regional Administrator the working day prior to the weekend or holiday and a duty official will be assigned by EPA for receiving the report. In the event the metals analysis exhibits concentrations in violation of the limitations of this permit, permittee shall cause the master of the vessel to not discharge and to return to port.

9. Permittee shall cause the Master of the vessel to stay in radio contact to immediately advise the local Captain of the Port (COTP) of any changes in the movement schedule of the vessel and to notify the COTP when dumping commences.

10. The permittee shall maintain complete records, which shall be available for inspection and copying by the Administrator, the Regional Administrator, or their designees, of:

a. The nature, including a complete description of relevant physical characteristics of material dumped pursuant to the permit.

b. The precise times and locations of dumping.

c. Any information relevant to the assessment of the impact of permitted dumping activities on the marine environment or human health or welfare.

11. The permittee shall, at the end of each six-month period, beginning on September 1, 1974, make a report to the Regional Administrator of the following information:

a. Information in the records to be kept pursuant to Paragraph 9 of the General Conditions.

b. A summary of the reports required by Paragraph 7 of the General Conditions.

c. Any additional records or reports required in the Special Conditions of this Permit.

d. An analysis of all elements listed in 227.31(b) (1) of the ocean dumping final regulations and criteria (40 CFR 227.31), excluding those reported under Special Condition 1.a. of herein permit, from a composite sampling from each barging operation.

12. The permittee shall make an additional report in accordance with the requirements of Paragraph 11 of the General Conditions at the expiration of this permit.

13. Reports required by Paragraphs 11 and 12 of the General Conditions shall be received by the Regional Administrator within 30 days following the end of the required reporting period.

14. If the dumping of material which is regulated by this permit is dumped due to emergency to safeguard life at sea in locations or in a manner not in accordance with the terms of this permit, the permittee shall as soon as the emergency allows, inform the nearest U.S. Coast Guard district for relay to other vessels in the area, and shall make a full report in accordance with the provisions of 18 U.S.C. 1001, within 30 days to the Regional Administrator of the emergency and the actions taken.

15. The reporting requirements contained in this permit are in addition to any reporting requirements of any other State or Federal Agency.

16. In the event any portion of the authorized dumping or transporting is done by a person, firm or corporation other than the named permittee, any and all reports required hereunder shall be jointly executed by both permittee and such other person, firm or corporation in accordance with the provision of 18 U.S.C. 1001 by an officer or employee of such other person, firm or corporation.

17. The performance of any transportation or dumping authorized by this permit, by any person, firm or corporation other than the named permittee shall not relieve permittee from full responsibility for compliance herewith, nor shall the issuance of this permit to permittee relieve such other person, firm or corporation from responsibility for compliance herewith, nor shall the existence of any such contractual or other relationship between permittee and any other such person, firm or corporation operate to relieve either party from responsibility for compliance with this permit or the Act or both.

18. Terms used in this permit which are defined in Section 3 of the Act shall have the same meaning herein.

19. The permittee shall cause to be installed, maintained and operated on board vessels engaged in dumping activities under this permit such electronic surveillance/ navigation equipment as required by the Coast Guard when such equipment becomes available and under such conditions as the Coast Guard prescribes officially.

Special Conditions

1. Description of Material.

In accordance with all other terms and conditions of this permit, the permittee is authorized to transport for dumping and to dump in ocean waters, material which shall not exceed in its physical and chemical characteristics the concentrations and loads listed below.

a.	<u>Composition Constituents</u>	<u>Concentrations (wt/wt) Not to Exceed Per Drum Contents</u>
	Total Sodium (in metal and oxide)	70%
	Total Calcium (in metal and oxide)	16%
	Sodium and Calcium Chlorides	range 18-23%
		<u>Per Barge Trip</u>
	Cadmium	0.24 pounds
	Mercury	0.10 pounds

b. The proposed waste material to be dumped is a waste sodium-calcium sludge. The contents are solid metallic sodium, metallic calcium, and oxides of these metals, plus sodium chloride.

c. The character of the material being dumped shall not be altered in its content from the foregoing by the addition of waste from sources other than those identified in the application or otherwise.

2. Amount of Material.

a. The permittee is authorized to transport and dump material described in Paragraph 1 in an amount not in excess of 800 drums per month.

b. Such transportation and dumping shall not be in excess of 800 drums per trip and at a frequency not to exceed 1 trip per month. The total number of drums authorized for dumping under this permit shall not exceed 8000.

3. Transportation and Barging Activities.

a. The port of departure for the dumping of the material described herein is Baton Rouge, Louisiana. The permittee is authorized to transport the material described herein from his facility to such port of departure to ocean waters.

b. During transportation and loading operations, there shall be no loss of material to any waterway. Transportation of the material from the Houston Plant shall be in accordance with all Department of Transportation regulations.

c. The permittee is authorized to dump the prescribed wastes in an approved dumping site which is defined in longitude and latitude as follows:

- (1) 28°00' north latitude
- (2) 28°10' north latitude
- (3) 89°15' west longitude
- (4) 89°30' west longitude

Permittee shall ensure by all available means that he is in the prescribed dump site prior to dumping. Should the Coast Guard, in its monitoring responsibilities, ascertain that dumping is occurring more than five (5) miles outside the prescribed boundaries, the Coast Guard may order the vessel to return to port, and the permit shall be subject to revocation or suspension pursuant to General Condition No. 3.

d. The permittee shall regulate the dumping rate so that the drummed wastes described in Special Condition 1, above, shall be dispersed from a barge hereinafter identified at intervals of 270 feet or more.

e. The permittee shall continue to use a system of identification for each container such that at any time later such container can be identified as specific wastes from the permittee's facility.

f. The permittee shall puncture each drum prior to release from the barge with not less than six (6) one-half inch holes. The holes shall be punched in the top and bottom and at 90 degrees apart around the center of each drum.

g. Permittee shall commence discharge of the material authorized by this permit no earlier than 1/2 hour after sunrise and shall cease dumping operations not later than 1/2 hour before sunset.

4. Means of Transportation.

a. The means of transportation shall be one of the following named vessels:

<u>Company</u>	<u>Barge</u>
Lockport Chemical Company (Chemical Waste Disposal Co.)	Magnolia I

b. The permittee shall place this permit or a copy of this permit in a conspicuous place in the vessel which will be used for the transportation or dumping herein authorized.

5. Implementation Schedules.

a. Permittee shall continue efforts to reduce the cadmium concentration in waste originating from the Houston plant, to be consistently below the 0.6 mg/kg level.

b. Permittee shall continue to investigate and develop the three land-based treatment methods for sodium-calcium sludge identified as the Lockheed, DuPont, and Ethyl processes and shall demonstrate its continued progress by the submission of incremental progress reports to the Regional Administrator on the following dates:

- (1) November 15, 1976;
- (2) March 15, 1977;
- (3) Expiration date of permit.

c. Progress reports in (b) above shall outline the decision-making process for selection of the best treatment method and the percent completion for each point of progress.

Suggested points of progress are:

- (1) Completion of a pilot program.
- (2) Engineering report on scale-up from pilot to commercial size equipment.
- (3) Evaluation of economics, safety, energy consumption, and environmental impact.


John C. White
Regional Administrator



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON
DALLAS, TEXAS 75201

March 12, 1975

Mr. W. F. Armstrong
Vice President
Ethyl Corporation
P. O. Box 341
Baton Rouge, Louisiana 70821

Dear Mr. Armstrong:

This office has evaluated the record obtained during and following the public hearing on January 16, 1975 concerning an ocean dumping permit requested by Ethyl Corporation. Based upon this review, I have determined to issue to Ethyl Corporation an interim ocean dumping permit for a period not to exceed one year. That permit is enclosed with this letter. I hasten to point out that this should not be considered by your company as a one year permit. The permit contains requirements for concerted effort by Ethyl Corporation toward development of alternatives to ocean disposal. Further, as will be explained in this letter, there are certain aspects to this research or development which could cause the permit to be revoked prior to the end of the year period.

It has been the policy of this office since the beginning of the ocean dumping program that alternatives to ocean dumping would be achieved by all permittees.

Mr. Sevenair notes (Hearing Transcript, p. 44) that the Ethyl Corporation reports no substantial progress in its search for alternative methods. Mr. Sevenair's remarks are followed by the statement that "as a Ph.D. in Chemistry, I find this lack of progress disturbing," (Hearing Transcript, p. 44).

This leads to the first to two points that I want to make in the remainder of this letter.

We are requiring, in the permit transmitted herewith, that Ethyl Corporation undertake a development program to find an alternative to ocean disposal of the sludge waste in question. Such requirements have been contained in your permits before. Your answer has been that there is no preferable alternative. More recently you stated that you have investigated various physical and chemical methods and that you

provided samples to consultants, disposal firms and other chemical companies not one of which has come up with an acceptable safe method. In the same letter you stated that you have not reported on a cost/benefit relationship since you have not been requested to do so, and then proceed to state that you have not found any practicable alternate disposal method which has an economic incentive. This latter statement appears to indicate that Ethyl's investigations of alternatives have been conducted under the premise that economic return or incentive to Ethyl Corporation is the most important criteria.

It further appears that the behavior of the drums and material contained therein, upon being dumped, is not known with certainty. The manual procedures used for holing the drums may not, apparently, result in uniform rupturing and reaction of the sludge.

At best, these procedures, however effective they may be in routine dumping operations, offer little assurance of protection to the public at large or the marine environment, in the event of an emergency dump under the provisions of Section 105(h) of the Marine Protection, Research and Sanctuaries Act, under which circumstances a legal short dump could occur. It is for this further reason that we must insist that a thorough examination of alternatives occur.

The permit provides for a progress report to be made on or about August 15, 1975. The nature, scope and quality of this report will determine whether or not the permit continues to be in effect for the balance of the one year period for which it is issued. If it is determined that, as of the date of this report, progress is not satisfactory, you are hereby placed on notice that I will consider terminating the permit under the provisions allowing it to be terminated for cause.

Let me elaborate on this point. Much of the research done by Ethyl Corporation, at least on an in-house basis, was done many years ago, perhaps as many as 20 years ago. A question exists whether Ethyl Corporation's efforts to ascertain alternatives to ocean disposal have been conscientious. A key factor, therefore, in the August 1975 report will be the extent to which Ethyl Corporation appears to have committed significant corporate resources to the effort to

determine alternatives. This is not to say that Ethyl may not retain one or more consultants to aid in this problem. It is to say that I will look very closely to determine whether or not the resources of the company which are used on a daily basis to produce and market the products from which these wastes come are being used in a comparable manner to determine alternatives toward the elimination of ocean disposal. I believe it is in the public's interest and I believe that the public has the right to insist that Ethyl Corporation devote the expertise which makes its process units effective and profitable to solve the environmental problem posed by ocean disposal of the sludge waste.

The success of Ethyl Corporation in developing technology and in applying technology is apparent. I solicit the priority use of that technological capability to solve the problem of finding an alternative to ocean disposal.

Your cooperation is sincerely requested.

Sincerely yours,

George J. Putniski
Regional Administrator



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1600 PATTERSON
DALLAS, TEXAS 75201

PERMIT

Permit No. 730D009C - Interim

Name of Permittee Ethyl Corporation

Effective Date March 12, 1975

Expiration Date Midnight, March 11, 1976

MARINE PROTECTION, RESEARCH AND
SANCTUARIES ACT (OCEAN DUMPING) PERMIT

In reference to the following application:

Application Number: 730D009C

for a permit authorizing the transportation and dumping of any material in compliance with the provisions of the Act of Congress enacted October 23, 1972, entitled The Marine Protection, Research and Sanctuaries Act of 1972, as amended (hereinafter referred to as the Act),

Ethyl Corporation,

hereinafter called permittee, is authorized to transport material for dumping from its facility at

P.O. Box 341

Baton Rouge, Louisiana 70821

and to dump to ocean waters, all in accordance with the following general and special conditions:

General Conditions

1. All transportation and dumping authorized herein shall be consistent with the terms and conditions of this permit.

2. a. Transportation to, and dumping at any location other than that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

b. Transportation and dumping of any material more frequently than or in excess of that identified and authorized by this permit, or dumping of material not authorized by this permit, shall constitute a violation of the terms and conditions of this permit.

c. Permittee shall comply with each and every condition, provision and limitation in this permit and compliance with one or more but less than all conditions, provisions and limitations shall not constitute a ground or grounds of defense in any proceeding against permittee for violation of one or more of such conditions, provisions or limitations.

3. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

a. Violation of any term or condition of this permit;

b. Misrepresentation, inaccuracy or failure by the applicant to disclose all relevant facts in the permit application.

c. A change in any condition or material fact upon which this permit is based that requires either a temporary or permanent reduction or elimination of the authorized transportation or dumping including, but not limited to, changes in conditions at the designated dumping site, and newly discovered scientific data relative to the granting of this permit.

d. A determination by the Regional Administrator that the permitted dumping has resulted, is resulting or may result in imminent and substantial harm to human health or welfare or the marine environment.

e. Failure to keep the records and/or to notify appropriate officials of dumping activities.

4. The permittee shall allow the Regional Administrator and/or the U.S. Coast Guard, and/or their authorized representatives, upon the presentation of credentials:

a. To enter into, upon, or through the permittee's premises, vessels or other premises or vessels under the control of permittee, where, or in which, a source of material to be dumped is located or in which any records are required to be kept under the terms and conditions of this permit or the Act;

b. To have access to and copy any records required to be kept under the terms and conditions of this permit or the Act;

c. To inspect any monitoring equipment or monitoring method required in this permit; or,

d. To sample any materials discharged or to be discharged.

5. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private or public property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

6. This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities, or except as authorized by this permit, the undertaking of any work in any navigable waters.

7. Within 72 hours of the completion of each barging operation, permittee shall forward by depositing in the United States mail to the Regional Administrator a report which shall be verified in accordance with the provisions of 18 U.S.C. 1001, by a responsible officer or employee of Permittee, which report shall contain as a minimum, the following:

a. The total amount of material dumped and the amounts, in parts per million and poundage, of each constituent thereof including cadmium and mercury. The content of the constituent shall be verified by an analysis of the material to be dumped which shall be performed prior to such dumping operation. Records of such analyses shall be included with such report.

b. A statement of the local time at which each barging operation was commenced, the latitude and longitude of the place where each barging operation was commenced, and the time and the latitude and longitude of the place where each barging operation ceased, as well as the latitude and longitude of the mid point of the course made good if such barging operation extended over a period of six hours.

c. The time, date and point of actual departure and return for each barging operation.

d. Fathometer records of the entire run during which barging operations or dumping operations were taking place.

e. A negative report of a cancelled or changed dump, if, for any reason, a numbered barge trip for which notice is required by General Condition No. 8, is not made or the timing is changed.

8. Permittee shall notify by telegram the U.S. Coast Guard (local Captain of the Port) and the Regional Administrator not later than 12 hours prior to the departure from permittee's facility of any tug or vessel which is to depart to sea for a barging operation. Included in such notification shall be:

a. A sequential numbering system starting with number 1, for the barge trips authorized by this permit. All communications relative to each barge trip shall reflect the number designated.

b. A statement of the amount, in tons, of materials to be dumped.

c. A chemical description, as determined by chemical analysis, of the constituents listed in Special Condition No. 1.

d. The names and registry numbers of the tug and barge scheduled for departure.

e. The estimated time of arrival at the dump site and the estimated time of return to port and the port of return.

Such notice shall be received by the Regional Administrator 12 hours in advance of departure or at such time greater than 12 hours to allow receipt by the Regional Administrator during normal working hours. If permittee anticipates a weekend or holiday dump, he shall notify the Regional Administrator the working day prior to the weekend or holiday and a duty official will be assigned by EPA for receiving the report. In the event the metals analysis exhibits concentrations in violation of the limitations of this permit, permittee shall cause the master of the vessel to not discharge and return to port.

9. Permittee shall cause the Master of the vessel to stay in radio contact with the local Captain of the Port (COTP) for all barge movements in accordance with Coast Guard surveillance requirements, and to notify the COTP when dumping commences.

10. The permittee shall maintain complete records, which shall be available for inspection and copying by the Administrator, the

Regional Administrator, or their designees, of:

a. The nature, including a complete description of relevant physical characteristics of material dumped pursuant to the permit.

b. The precise times and locations of dumping.

c. Any information relevant to the assessment of the impact of permitted dumping activities on the marine environment or human health or welfare.

11. The permittee shall, at the end of each six-month period, beginning on September 1, 1974, make a report to the Regional Administrator of the following information:

a. Information in the records to be kept pursuant to Paragraph 9 of the General Conditions.

b. A summary of the reports required by Paragraph 7 of the General Conditions.

c. Any additional records or reports required in the Special Conditions of this Permit.

d. An analysis of all elements listed in 227.31(b)(1) of the ocean dumping final regulations and criteria (40 C.F.R. 227.31), excluding those reported under Special Condition 1.a. of herein permit, from a composite sampling from each barging operation.

12. The permittee shall make an additional report in accordance with the requirements of Paragraph 11 of the General Conditions at the expiration of this permit.

13. Reports required by Paragraphs 11 and 12 of the General Conditions shall be received by the Regional Administrator within 30 days following the end of the required reporting period.

14. If the dumping of material which is regulated by this permit is dumped due to emergency to safeguard life at sea in locations or in a manner not in accordance with the terms of this permit, the permittee shall make a full report in accordance with the provision of 18 U.S.C. 1001, within 30 days to the Regional Administrator of the emergency and the actions taken.

15. The reporting requirements contained in this permit are in addition to any reporting requirements of any other State or Federal Agency.

16. In the event any portion of the authorized dumping or transporting is done by a person, firm or corporation other than the named permittee, any and all reports required hereunder shall be jointly executed by both permittee and such other person, firm or corporation in accordance with the provision of 18 U.S.C. 1001 by an officer or employee of such other person, firm or corporation.

17. The performance of any transportation or dumping authorized by this permit, by any person, firm or corporation other than the named permittee shall not relieve permittee from full responsibility for compliance herewith, nor shall the issuance of this permit to permittee relieve such other person, firm or corporation from responsibility for compliance herewith, nor shall the existence of any such contractual or other relationship between permittee and any other such person, firm or corporation operate to relieve either party from responsibility for compliance with this permit or the Act or both.

18. Terms used in this permit which are defined in Section 3 of the Act shall have the same meaning herein.

Special Conditions

1. Description of Material

In accordance with all other terms and conditions of this permit, the permittee is authorized to transport for dumping and to dump in ocean waters, material which shall not exceed in its physical and chemical characteristics the concentrations and loads listed below.

a.	<u>Composition Constituents</u>	<u>Concentrations (wt/wt) Not to Exceed Per Drum Contents</u>
	Total Sodium (in metal and oxide)	70%
	Total Calcium (in metal and oxide)	16%
	Sodium and Calcium Chlorides	range 18-23%
		<u>Per Barge Trip</u>
	Cadmium	0.24 pounds
	Mercury	0.10 pounds

b. The proposed waste material to be dumped is a waste sodium-calcium sludge. The contents are solid metallic sodium, metallic calcium, and oxides of these metals, plus sodium chloride.

c. The character of the material being dumped shall not be altered in its content from the foregoing by the addition of waste from sources other than those identified in the application or otherwise.

2. Amount of Material

a. The permittee is authorized to transport and dump material described in Paragraph 1 an amount not in excess of 800 drums per month.

b. Such transportation and dumping shall not be in excess of 800 drums per trip and at a frequency not to exceed 1 trip per month. The total number of drums authorized for dumping under this permit shall not exceed 8000.

3. Transportation and Barging Activities

a. The port of departure for the dumping of the material described herein is Baton Rouge, Louisiana. The permittee is authorized to transport the material described herein from his facility to such port of departure to ocean waters.

b. During transportation and loading operations, there shall be no loss of material to any waterway. Transportation of the material from the Houston Plant shall be in accordance with all Department of Transportation regulations.

c. The permittee is authorized to dump the prescribed wastes in an approved dumping site which is defined in longitude and latitude as follows:

(1)	<u>28</u>	degrees	<u>00</u>	minutes north latitude
(2)	<u>28</u>	degrees	<u>10</u>	minutes north latitude
(3)	<u>89</u>	degrees	<u>15</u>	minutes west longitude
(4)	<u>89</u>	degrees	<u>30</u>	minutes west longitude

e. The permittee shall regulate the dumping rate so that the drummed wastes described in Special Condition 1, above, shall be dispersed from a barge hereinafter identified at intervals of 270 feet or more.

f. The permittee shall continue to use a system of identification for each container such that at any time later such container can be identified as specific wastes from the permittee's facility.

g. The permittee shall puncture each drum prior to release

from the barge with not less than six (6) one-half inch holes. The holes shall be punched in the top and bottom and at 90 degrees apart around the center of each drum.

h. Permittee shall commence discharge of the material authorized by this permit no earlier than 1/2 hour after sunrise and shall cease dumping operations not later than 1/2 hour before sunset.

4. Means of Transportation

a. The means of transportation shall be one of the following named vessels:

<u>Company</u>	<u>Barge</u>
Lockport Chemical Company (Chemical Waste Disposal Co.)	Magnolia I

b. The permittee shall place this permit or a copy of this permit in a conspicuous place in the vessel which will be used for the transportation or dumping herein authorized.

5. Implementation Schedules

a. Permittee shall continue efforts to reduce the cadmium concentration in waste originating from the Houston plant, to be consistently below the 0.6 mg/kg level.

b. Permittee shall achieve compliance with (a) above in accordance with 40 C.F.R. 227.4 and the following schedule:

(1) Report on treatment or process modification required for cadmium reduction	<u>July 1, 1975</u>
(2) Progress report	<u>October 1, 1975</u>
(3) Reduction of Cadmium to 0.6 mg/kg	<u>December 30, 1975</u>

c. Permittee shall submit the required report of progress to the Regional Administrator on the date specified for the report. Where an action is required in (b) above by a certain date, a written notice of compliance or noncompliance shall be submitted within 15 days following each elapsed date. Each notice of noncompliance shall include:

(1) a description of the noncompliance and an explanation for the noncompliance;

(2) a description of any actions taken or proposed by the permittee to comply with the requirement; and

(3) a date for the attainment of the requirement plus an assessment of the probability that permittee will meet the next requirement of time.

d. Permittee shall initiate research having as his objective the development of alternate methods of disposal and/or process revisions reducing the volume of the sludge, said research to be conducted by a competent research organization, such as his own, in a bona fide effort leading to the elimination of ocean disposal.

e. The research and study efforts by permittee should include, but not be limited to:

(1) Reacting the sludge with anhydrous alcohols, in an inert atmosphere;

(2) Reacting the sludge with waste chlorinated hydrocarbons (such as hexachlorobutadiene) in an alcohol solution, in an inert atmosphere;

(3) Processing alternatives available to other manufacturers of sodium which would separate the sodium-calcium sludge into three components: a material suitable for recycle to the Downs cells, metallic sodium and a minimum by-product waste.

(4) Reinvestigation of sludge processing methods previously reported to Region VI, using up-to-date scientific techniques.

f. Permittee shall indicate his progress on the requirements of 5.d and 5.e above in accordance with the following schedule:

(1) Progress report in writing and presented to the Regional Administrator (R.A.) in a meeting: August 15, 1975;

(2) Progress report in writing and presented to the R.A. in a meeting: January 7, 1976.

g. Reports submitted in compliance with (f) above shall contain the following elements: description of the research objectives, description of the methodology used, results of the study, discussion of the results and conclusions as to the practicality of the processing alternatives. The conclusions of the report shall be fully substantiated by economic, physical, chemical, biological and engineering data gathered during the study, as well as the application of sound engineering judgement. All reports submitted in compliance with (f) shall have the approval and concurrence of the corporate vice-president of research

and development. Those alternatives concerned with modification to the sodium manufacturing process or sludge disposal processes shall also have the concurrence of the director of process engineering.

h. The degree of progress and research of alternatives required by this Special Condition No. 5 shall, in the discretion of the Regional Administrator, subject this permit to revocation or suspension under General Condition No. 3.

March 12, 1975
Date


Regional Administrator

ENVIRONMENTAL PROTECTION AGENCY

REGION VI

1600 PATTERSON, SUITE 1100

DALLAS, TEXAS 75201

February 13, 1974

OFFICE OF THE
REGIONAL ADMINISTRATOR

Mr. W. F. Armstrong
Vice President
Ethyl Corporation
Post Office Box 341
Baton Rouge, Louisiana 70821

Dear Mr. Armstrong:

Your application for an ocean dumping permit under Public Law 92-532 has been the subject of a final determination by this office following proper public notice and public hearing on December 19, 1973. Your permit is hereby issued as an interim permit, effective on February 13, 1974, with an expiration date of February 13, 1975. The permit is numbered 730D009B.

Several changes have been made in the proposed permit as discussed at the public hearing. These are as follows:

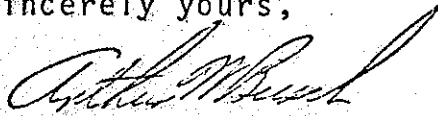
1. The expiration date has been changed to allow for a full-year interim permit.

2. The number of drums per trip has been increased to 800 in order to allow for a possible lesser number of trips per year.

3. The absolute prohibition of dumping of material from the Houston facility, which contains cadmium in excess of the guidelines, has been changed to allow for no more dumping under this permit. The date for the prohibition of dumping under this permit has been extended until December 15, 1974. The progress of the elimination or reduction of the cadmium concentrations will be evaluated during this time.

Should you have any questions or comments pertaining to the enclosed permit, please contact us at your earliest convenience.

Sincerely yours,



Arthur W. Busch
Regional Administrator

Enclosure